

Academic Self-Efficacy and Academic Self-Esteem as Predictors of Academic Procrastination among Junior High School Students

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Abstract

Academic procrastination poses a significant challenge to learning outcomes among adolescents, often stemming from psychological and motivational factors. This study investigates the extent to which academic self-efficacy and academic self-esteem simultaneously predict academic procrastination in students. A quantitative approach was employed, using multiple linear regression, to examine the predictive power of both variables. The participants consisted of 220 eighth-grade students from State Junior High School 4 Purworejo. Data were collected using three instruments: an academic procrastination scale, an academic self-efficacy scale, and an academic self-esteem scale. The results revealed that academic self-efficacy and academic self-esteem together significantly predicted academic procrastination ($p < 0.001$), accounting for 50.9% of its variance ($R^2 = 0.509$). These findings underscore the importance of fostering students' academic self-efficacy and self-esteem to reduce procrastination and enhance academic performance.

Keywords: academic self-efficacy, academic self-esteem, academic procrastination

Abstrak

Penelitian ini bertujuan untuk menganalisis peran efikasi diri akademik dan self-esteem akademik secara bersamaan dalam memprediksi perilaku prokrastinasi akademik pada peserta didik. Metode yang digunakan adalah pendekatan kuantitatif dengan fokus pada eksplorasi dua variabel prediktor tersebut terhadap kecenderungan menunda tugas akademik. Subjek penelitian melibatkan 220 peserta didik kelas 8 di SMP Negeri 4 Purworejo. Data dikumpulkan menggunakan tiga instrumen berupa skala prokrastinasi akademik, skala efikasi diri akademik, dan skala self-esteem akademik. Untuk menguji hipotesis, digunakan analisis regresi linear berganda. Hasil analisis menunjukkan bahwa secara simultan, efikasi diri akademik dan harga diri akademik memiliki pengaruh yang signifikan terhadap prokrastinasi akademik, dengan nilai signifikansi kurang dari 0,001 ($p < 0,05$). Nilai koefisien determinasi (R^2) menunjukkan bahwa kedua variabel tersebut memberikan kontribusi sebesar 50,9% terhadap variasi prokrastinasi akademik, sementara 49,1% sisanya dijelaskan oleh variabel lain di luar cakupan penelitian ini.

Keywords: efikasi diri akademik, self-esteem akademik, prokrastinasi akademik

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INTRODUCTION

Education in Indonesia continues to evolve through ongoing curriculum reforms. One of the most recent changes is outlined in the Ministry of Education, Culture, Research, and Technology Regulation (Permendikbudristek) No. 12 of 2024, which mandates the implementation of a talent-oriented Merdeka Curriculum across early childhood, primary, and secondary education. This policy encourages schools to develop learning environments that nurture individual students' potential and autonomy. However, such an approach also demands greater self-regulation, including the ability to manage time, set goals, and stay motivated, skills that not all students possess equally.

At State Junior High School 4 Purworejo, the Merdeka Curriculum has been implemented to support students' talents and interests. While some students show positive responses, demonstrating initiative, enthusiasm, and creativity, others display signs of disengagement, including a tendency to postpone academic tasks. To explore this issue more deeply, interviews were conducted with 15 eighth-grade students. The responses varied: several students reported feeling confident and actively sought teacher guidance, while others reported difficulty focusing, ineffective group collaboration, and trouble managing priorities. These narratives reflect the broader phenomenon of academic procrastination, which may be emerging as a barrier to optimal learning under the new curriculum.

Academic procrastination, defined as the irrational and self-defeating delay of educational tasks, is particularly prevalent among adolescents. Touloupis and Campbell (2024) found that procrastination is more common in secondary students than in university students, who tend to have greater intrinsic motivation. Kanwar (2023) similarly reported that 80–95% of students regularly postpone academic responsibilities, indicating a widespread behavioral concern. This behavior affects both learning processes and outcomes. Students who procrastinate often experience lower productivity, poorer educational achievement, increased anxiety, and reduced self-regulation (Kooren, Nooijen, & Paas, 2024). These effects are even more pronounced in digital learning settings with minimal supervision (Duan et al., 2024).

Among the psychological factors linked to procrastination, academic self-efficacy plays a key role. Students with high self-efficacy are more confident in their abilities and better able to manage academic demands, reducing the likelihood of procrastination. Caramat et al. (2024) found a positive link between academic self-efficacy and active procrastination. Meanwhile, self-esteem also influences tendencies toward procrastination. Students with low self-esteem often avoid tasks out of fear of failure, whereas those with higher self-esteem tend to engage more confidently and consistently with academic responsibilities (Ling et al., 2024; Ghasempour et al., 2024).

Both constructs, academic self-efficacy and self-esteem, have been shown to influence procrastination significantly. Gracia-Ros et al. (2022) and Khotimah, Radjah, and Handarini (2024) emphasized that students with high self-efficacy often possess stronger self-esteem and procrastinate less. However, existing studies usually examine these variables in isolation or focus on university students. There is a lack of research that simultaneously explores the roles of academic self-efficacy and self-esteem in predicting academic procrastination among junior high school students in Indonesia. This study aims to determine the extent to which academic self-efficacy and academic self-esteem can simultaneously predict academic procrastination in grade 8 students at State Junior High School 4 Purworejo.



METHOD

This study employed a quantitative approach to examine the extent to which academic self-efficacy and academic self-esteem predict academic procrastination among students. This study used a saturated sampling technique, in which the entire population that met the research criteria was selected as participants. In this case, all eighth-grade students at State Junior High School 4 Purworejo were included as research subjects.

The instruments used in this study met validity standards, both from the original developers and from Indonesian researchers who validated the adapted versions. Content relevance and item appropriateness were evaluated by the academic advisor through expert judgment. Academic self-efficacy was measured using the Morgan-Jinks Student Efficacy Scale (MJSES) developed by Jinks and Morgan (1999), with a reported reliability coefficient of 0.82. The scale, modified by Qudsyi and Putri (2016), showed a Cronbach's alpha of 0.797. The instrument consists of 24 items, 12 favorable and 12 unfavorable, using a four-point Likert scale.

Academic self-esteem was assessed using the Behavioral Academic Self-Esteem Scale (BASE) developed by Coopersmith and Gilberts (1982), which had a reliability coefficient of 0.75. The version used in this study was adapted from Rahayu (2024) and had a Cronbach's alpha of 0.89. It comprises 42 items (21 favorable and 21 unfavorable), also measured using a four-point Likert scale.

Academic procrastination was measured using the Academic Procrastination Scale developed by Wardah (2015), which was specifically designed for junior high school students and adapted from the theoretical framework of McCloskey and Scielzo (2015). The instrument demonstrated high internal consistency, with a Cronbach's alpha of 0.984. The scale includes 14 items, all measured on a four-point Likert scale.

To examine the proposed hypotheses, the data were analyzed using multiple linear regression. Before conducting the multiple linear regression analysis, several assumption tests were performed to validate the model, including tests for normality, linearity, multicollinearity, and heteroscedasticity (Santoso, 2010). These preliminary steps were essential to ensure the accuracy and validity of the inferential results.

RESULT AND DISCUSSION

Before the main study, a pilot test was conducted with 60 eighth-grade students from a different school. Participants completed the printed versions of the academic self-efficacy, academic self-esteem, and academic procrastination scales. The aim was to identify items with adequate discriminative power for inclusion in the final analysis.

Item selection was performed using SPSS version 20. From the original 14 items on the academic procrastination scale, 10 items demonstrated acceptable item-total correlations ($\alpha > 0.30$), while four items were excluded due to poor discrimination ($\alpha \leq 0.30$). The remaining 10 items yielded a Cronbach's alpha of 0.799, indicating good reliability. On the academic self-efficacy scale, 17 of 24 items met the required discrimination threshold, while seven items were excluded. The final 17 items showed a Cronbach's alpha of 0.856, suggesting high reliability.

For the academic self-esteem scale, 24 of 42 items were retained after item analysis, with the remaining 18 discarded for low item-total correlations. The reliability coefficient for the 24-item version was 0.899, indicating excellent internal consistency.

The hypothesis of this study posited that academic self-efficacy and academic self-esteem jointly predict academic procrastination. Before testing the hypothesis, several assumption tests were performed to validate the model.



Table 1.
The Kolmogorov-Smirnov Test

	Unstandardized Residual
Asymp. Sig. (2-tailed) ^c	.200 ^d

The Kolmogorov-Smirnov test indicated that the data were normally distributed, with a significance value of 0.200 ($p > 0.05$), thus fulfilling the assumption of normality for regression analysis.

Table 2.
Result of The Linearity Test for Academic Procrastination and Academic Self-Efficacy

	F	Sig
Academic Procrastination	9.297	<.001
Academic Self-Efficacy	210.597	<.001

Linearity testing showed that the relationship between academic self-efficacy and academic procrastination met the linearity assumption, with an F value of 210.597 and a significance level below 0.001 ($p < 0.05$).

Table 3.
Result of The Linearity Test for Academic Procrastination and Academic Self-Esteem

	F	Sig
Academic Procrastination	3.568	<.001
Academic Self-Esteem	86.394	<.001

Similarly, the relationship between academic self-esteem and academic procrastination was also linear, with an F value of 86.394 and a significance level below 0.001 ($p < 0.05$).

Table 4.
Results of the Multicollinearity Test

	Collinearity Statistics	
	Tolerance	VIF
Academic Self-Efficacy	.611	1.638
Academic Self-Esteem	.611	1.638

Multicollinearity was assessed through tolerance and Variance Inflation Factor (VIF) values. The tolerance value was 0.611 (> 0.1), and the VIF was 1.638 (< 10), indicating no multicollinearity issues.



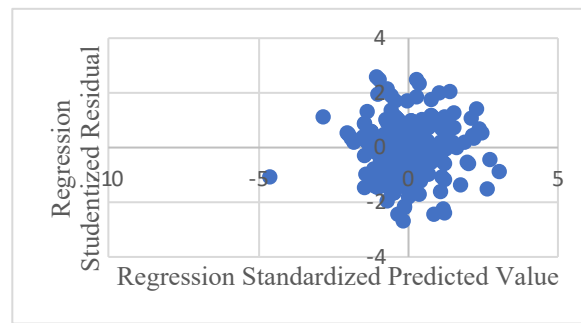


Figure 1. Scatterplot Diagram

Lastly, the scatterplot of residuals showed a random distribution of points above and below the zero line on the Y-axis, indicating that the data met the assumption of homoscedasticity and that the regression model could be appropriately used.

Table 5.

The Coefficient of Determination Test Results (R^2)

R Square	Std. Error of the Estimate
.509	2.322

The findings of this study confirmed the hypothesis that academic self-efficacy and academic self-esteem jointly predict academic procrastination. This is reflected in the coefficient of determination ($R^2 = 0.509$), indicating that over half of the variance in students' procrastination behavior can be explained by these two psychological constructs. There are at least two plausible explanations for this result. First, some students view academic self-efficacy as a guiding principle in their learning journey. This belief is further strengthened by high academic self-esteem, and together, these internal resources appear to reduce the likelihood of procrastination. Second, students who possess strong academic self-efficacy often report increased motivation to study diligently. When supported by a healthy level of academic self-esteem, this combination becomes a buffer against avoidance behaviors.

This pattern aligns with prior findings by Khotimah et al. (2024), who emphasized the significant roles of both academic self-efficacy and self-esteem in influencing students' academic behaviors, particularly procrastination. Their study revealed that students with high academic self-efficacy are more likely to initiate and complete academic tasks on time. At the same time, those with low confidence tend to delay tasks due to self-doubt and fear of failure.

Furthermore, Liu (2024) found that academic self-esteem is inversely related to academic procrastination, and this association is mediated by general self-efficacy. In other words, students with lower self-esteem also tend to experience diminished self-efficacy, which in turn increases their tendency to procrastinate. Conversely, boosting self-esteem may enhance self-efficacy, thereby reducing procrastination.

Table 6.

The F-Test Results

	F	Sig.
Regression	112.290	<.001 ^b



The significance of these relationships was confirmed by the F-test, which produced a value of 112.290 with a significance level below .001 ($p < .05$). These results suggest that both academic self-efficacy and academic self-esteem act as reliable predictors of academic procrastination. The higher the students' scores on these two constructs, the less likely they are to delay their educational responsibilities.

Table 7.
Partial Test Results (The T-Test)

	Unstandardized Coefficients		t	Sig.
	B	Std. Error		
(Constant)	48.483	1.848	26.237	<.001
Academic Self-Efficacy	-.449	.045	-9.949	<.001
Academic Self-Esteem	-.074	.029	-2.548	.012

Partial test results further demonstrated that academic self-efficacy significantly influences procrastination. The t-test for academic self-efficacy yielded a value of -9.949 ($p < .001$), indicating that students who are confident in their academic abilities are less likely to delay task completion. This finding is supported by Handayani, Sugiharto, and Sugiyo (2021), who observed a negative relationship between academic self-efficacy and academic procrastination among vocational high school students.

These findings are further supported by Bandura's (1997) assertion that individuals are unlikely to act or persist unless they believe they have the capacity to produce desired outcomes. This psychological insight offers a foundational explanation for why students with low self-efficacy are more prone to procrastination: a lack of confidence in their abilities leads to avoidance rather than engagement.

Similarly, academic self-esteem was also found to significantly predict academic procrastination, with a t-value of -2.548 and a significance level of .012 ($p < .05$). Research by Ling et. al (2024) supports this result, showing that individuals with higher academic self-esteem are more likely to make timely decisions and initiate academic tasks promptly.

Categorical data analysis from 220 students showed that 36.36% (80 students) exhibited moderate levels of academic procrastination, 40.45% (89 students) reported moderate academic self-efficacy, and 44.55% (98 students) fell into the mild category for academic self-esteem. These distributions are consistent with Gracia-Ros et al. (2022), who found that both academic self-efficacy and self-esteem significantly contribute to academic procrastination, with self-esteem correlating with delay behaviors among male and female students.

In the context of Indonesia's Independent Curriculum (Kurikulum Merdeka), these findings hold practical relevance. This curriculum framework emphasizes student autonomy, talent development, and learner agency, all of which demand strong self-regulation and motivational competence. Therefore, enhancing students' academic self-efficacy and self-esteem is essential.



Several evidence-based approaches can support this goal. For example, cognitive-behavioral interventions have been shown to improve students' self-beliefs and reduce procrastination (Özer et al, 2020; Steel & Klingsieck, 2023). School counselors can implement short-term training modules focusing on self-monitoring, goal setting, and cognitive reframing to reduce avoidance behaviors and promote academic engagement (Kim & Seo, 2021).

Moreover, project-based learning (PBL), one of the core strategies of the Merdeka Curriculum, offers a practical platform for building efficacy and confidence. By engaging in collaborative, real-world projects, students experience mastery, autonomy, and constructive feedback, all of which contribute to the development of self-efficacy and task ownership (Patall et al, 2022).

Integrating these strategies within classroom instruction and guidance services can provide students with the psychological resources they need to thrive academically. Schools may also consider piloting structured intervention programs that combine counseling and instructional strategies to address procrastination and strengthen learners' academic identities.

CONCLUSION

This study demonstrates that academic self-efficacy and academic self-esteem are significant and simultaneous predictors of academic procrastination among junior high school students. Students with higher confidence in their academic abilities and greater self-worth tend to exhibit lower levels of procrastination. These findings suggest that enhancing both academic self-efficacy and academic self-esteem may serve as a strategic approach to reducing academic procrastination. The analysis revealed that these two psychological factors collectively account for 50.9% of the variance in academic procrastination, indicating their substantial influence. Furthermore, both variables independently showed significant negative correlations with procrastination, highlighting their individual roles in shaping students' academic behavior. Given the moderate levels of academic self-efficacy, academic self-esteem, and academic procrastination among a considerable portion of participants, targeted school-level interventions are recommended. Future studies should explore additional potential contributing variables, such as motivation, parental support, and school climate, to provide a more comprehensive understanding of academic procrastination among adolescents.

REFERENCES

- Azwar, S. (2021). *Penyusunan skala psikologi* (Edisi ke-3). Yogyakarta: Pustaka Pelajar.
- Bandura, A. (1997). *Self-efficacy: The exercise of control*. New York: W. H. Freeman.
- Caramat, T. J., Obtinalla, P. S., Sison, J., Cardaño, E., Abrera, R. A., & Bacorro, K. (2024). The mediating role of academic self-efficacy in the relationship between academic procrastination and test anxiety. *Journal of Studies in Social Sciences*, 13(1). <https://doi.org/10.3389/fpsyg.2024.1454234>.
- Duan, H., Zhao, W., Zhang, Z., Tao, J., Xu, X., Cheng, N., & Guo, Q. (2024). The effect of teacher support on the sustainable online academic self-efficacy of college students: The mediating effect of academic procrastination. *Sustainability*, 16(5), 2123. <https://doi.org/10.3390/su16052123>.
- Ghasempour, S., Babaei, A., Nouri, S., Basirinezhad, M. H., & Abbasi, A. (2024). Relationship between academic procrastination, self-esteem, and moral



- intelligence among medical sciences students: A cross-sectional study. *BMC Psychology*, 12, 225. <https://doi.org/10.1186/s40359-024-01731-8>.
- Gracia-Ros, R., Pérez-González, F., Tomás, J. M., & Sancho, P. (2022). Effects of self-regulated learning and procrastination on academic stress, subjective well-being, and academic achievement in secondary education. *Current Psychology*, 42(2), 1–15. <https://doi.org/10.1007/s12144-022-03759-8>.
- Handayani, E. T., Sugiharto, D. Y., & Sugiyo, S. (2021). The relationship between self-efficacy and peer support in academic procrastination behavior. *Jurnal Bimbingan Konseling*, 10(3), 148–155. <https://doi.org/10.15294/jubk.v10i3.50472>.
- Kanwar, C. (2023). Academic procrastination and cognitive emotional regulation among young adults. *The International Journal of Indian Psychology*, 11(1), 1391–1396. <https://doi.org/10.25215/1101.141>
- Kementerian Pendidikan, Kebudayaan, Riset, dan Teknologi. (2024). Peraturan Menteri Pendidikan, Kebudayaan, Riset, dan Teknologi Nomor 12 Tahun 2024 tentang kurikulum pada pendidikan anak usia dini, jenjang pendidikan dasar, dan jenjang pendidikan menengah. *Berita Negara Republik Indonesia Tahun 2024 Nomor 172*. https://kurikulum.kemdikbud.go.id/file/1711507788_manage_file.pdf.
- Khotimah, R. H., Radjah, C. L., & Handarini, D. M. (2024). Hubungan antara konsep diri akademik, efikasi diri akademik, harga diri, dan prokrastinasi akademik pada siswa SMP negeri di kota Malang. *Jurnal Kajian Bimbingan dan Konseling*, 1(2), 60–67. <https://doi.org/10.17977/um001v1i22016p060>.
- Kim, K. R., & Seo, E. H. (2021). The effectiveness of cognitive-behavioral therapy interventions on academic procrastination: A meta-analysis. *Cognitive Therapy and Research*, 45(3), 456–470. <https://doi.org/10.1007/s10608-020-10135-3>.
- Kooren, N. S., Nooijen, C., & Paas, F. (2024). The influence of active and passive procrastination on academic performance: A meta-analysis, 14(3). *Education Sciences*. <https://doi.org/10.3390/educsci14030323>.
- Ling, W., Yang, F., Huang, T., & Li, X. (2024). Self-esteem mediates the relationship between the parahippocampal gyrus and decisional procrastination at resting state. *Frontiers in Neuroscience*, 18. <https://doi.org/10.3389/fnins.2024.1341142>.
- Liu, J. (2024). Academic procrastination of high school students as a product of low self-esteem: A mediation role of general self-efficacy. *Communications in Humanities Research*, 40, 116–125. <https://doi.org/10.54254/2753-7064/40/20242289>.
- Özer, B. U., Demir, A., & Ferrari, J. R. (2020). Reducing academic procrastination through cognitive-behavioral group therapy: A controlled trial. *Journal of Rational-Emotive & Cognitive-Behavior Therapy*, 38(2), 221–239. <https://doi.org/10.1007/s10942-019-00328-1>.
- Patall, E. A., Sullivan, A., & Darnell, K. (2022). Project-based learning as a tool for enhancing student motivation and self-regulation. *Contemporary Educational Psychology*, 69, 102058. <https://doi.org/10.1016/j.cedpsych.2022.102058>.
- Qudsyi, H., & Putri, M. I. (2016). Self-efficacy and anxiety of national examination among high school students. *Procedia - Social and Behavioral Sciences*, 217, 268–275. <https://doi.org/10.1016/j.sbspro.2016.02.082>.
- Rahayu, E. (2024). Efektivitas bimbingan kelompok dengan metode exercise dalam mengembangkan harga diri akademik remaja (Tesis S2, Universitas Pendidikan Indonesia). *Repository Universitas Pendidikan Indonesia*.
- Santoso, S. (2010). *Statistik multivariat*. Jakarta: PT Elex Media Komputindo.



- Steel, P., & Klingsieck, K. B. (2023). Procrastination interventions: Meta-analytical findings and recommendations for practice. *Educational Psychology Review*, 35(1), 1–24. <https://doi.org/10.1007/s10648-022-09692-6>.
- Touloupis, T., & Campbell, M. (2024). The role of academic context-related factors and problematic social media use in academic procrastination: A cross-sectional study of students in elementary, secondary, and tertiary education. *Social Psychology of Education*, 27, 175–214. <https://doi.org/10.1007/s11218-023-09817-8>.
- Wardah, R., & Suwarjo, S. (2023). Development of academic procrastination scale for students of SMP Muhammadiyah 5 Yogyakarta. *Atlantis Press*, 52-58. https://doi.org/10.2991/978-2-38476-030-5_7.

